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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,199	10/20/2003	George P. Teitelbaum	VLINK.2CP2DV1	4421

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EXAMINER

SWIGER III, JAMES L

ART UNIT	PAPER NUMBER
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3733

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	10/689,199		TEITELBAUM ET AL.	
	Examiner		Art Unit	
	James L. Swiger		3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-30 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-30 and 33-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/21/2006; 10/10/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 26-27 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stalcup et al. (US 6,336,930) in view of Fournet-Fayard et al. (US 5,486,174).

Stalcup et al. disclose an orthopedic construct as a plate that has a first and second support structure (see two vertical portion of Fig. 1), both of which are configured for attachment to the spine, a crossbar (proximate to the tube 30), and wherein the cross bar is capable of attachment subcutaneously, and wherein also the cross bar comprises a media that is hardenable while the support structure is positioned within the body of the patient (Col. 3, lines 24-37). Note that the disclose states that the hardenable material is in a bag. However, the "bag" is part of the bar structure and is considered part of the bar in relation to claim 26. The first support structure also may be considered to have hardenable material, since the polymer bag extends to this part of the structure (see Fig. 2). Stalcup et al. further disclose a first and second aperture (22) capable of attachment to the bone and a first and second bone anchor (28).

Stalcup et al. disclose the claimed invention except for a bone anchor with a proximal and distal end and where the proximal head end has a portal or aperture

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allowing the support structure to extend through it. Fournet-Fayard et al. disclose a bone anchor with a hole (Fig. 3) with a portal at the head, allowing a spinal support structure through. This modification is used as an improved guidance means to keep the two portions together (Col. 2, lines 32-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Stalcup et al. having at least a screw with an aperture in the head in view of Fournet-Fayard et al. to better secure the interface between the two supports and cross bar.

Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Stalcup et al. '930 and Fournet-Fayard et al. '174 as applied to claims 27 and 26 respectively above, and further in view of Gelbard (US Patent 5,397,363). The combination of Stalcup et al. '930 and Fournet-Fayard et al. '174 disclose the claimed invention except for cross ties to connect the first and second support to the cross bar. Gelbard discloses a cross-link fastening system (see Fig. 4) that allows operative association with the attachment screws by means of a top mounted link that is receptive to the protruding members. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device the combination of Stalcup et al. '930 and Fournet-Fayard et al. '174 having at least a cross tie system in view of Gelbard to better secure the screws and plate in use.

Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Stalcup et al. '930 and Fournet-Fayard et al. '174 as applied to claim 26 above, and further in view of Boyce et al. (US 5,899,939). The combination of Stalcup et al. '930 and Fournet-Fayard et al. '174 disclose the claimed invention except

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for specific use of epoxies and polyurethane in the hardenable mixture. Boyce et al. disclose a bone-derived implant that would be capable of interfacing from a material standpoint with a spinal structure on bone. Boyce et al. disclose that epoxy-based compounds are used (Col. 4, line 5) and polyurethane-based compounds are used (Col. 4, line 33) that allow for proper bone-derived materials to be properly bioabsorbable (Col. 4). It would have been obvious to one having ordinary skill in the art the time the invention was made to construct the device of the combination of Stalcup et al. '930 and Fournet-Fayard et al. '174 having epoxy and polyurethane based ingredients in the hardening material in view of Boyce et al. to make the material more bioabsorbable.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Stalcup et al. '930 and Fournet-Fayard et al. '174 as applied to claim 26 above, and further in view of Tormala et al (US 5,084,051). The combination of Stalcup et al. '930 and Fournet-Fayard et al. '174 disclose the claimed invention except for reinforcing fibers around the cavity created within the plate bag (34). Tormala et al. disclose fibers that enable a strengthening of the bioceramic or hardening component (Col. 4, lines 19-42). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of the combination of Stalcup et al. '930 and Fournet-Fayard et al. '174 having at least fibers within the cavity of the cross bar for reinforcement in view of Tormala et al. to better strengthen the spinal device.

Response to Arguments

Applicant's arguments with respect to claims 26-30 and 33-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James L. Swiger whose telephone number is 571-272-5557. The examiner can normally be reached on Monday through Friday, 9:00am to 5:30pm.

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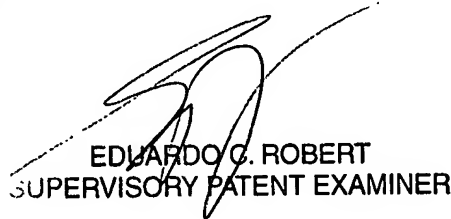
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JLS

11/27/2006



EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER